Frazer.]

- II. Middle numbers a combination of Table I.
 - 1. First four numbers increase with motion of watch hands ; b 3, and c 3.
 - 2. First four numbers increase against motion of watch hands; a 2, and d 2.
 - Number fifteen heads the column. Order of outsiders, 15, 14, 13, 12, 8, 9, 10, 11, 7, 6, 5.
- III. Middle numbers a combination of Table IV.
 - 1. Last four numbers decrease with motion of watch hands; a 1, and d 3.
 - 2. Last four numbers decrease against motion of watch hands; b 3, and c 2.

IV. Middle numbers a combination of Table III.

- 1. Last four numbers decrease with motion of watch hands; b 1, and c 2.
- 2. Last four numbers decrease against motion of watch hands ; d 3, and a 2.

It is thus seen that there are four tables, each containing twelve combinations of the middle numbers or 48 combinations in all. Each of the three methods of solution takes four combinations from each table or one from every horizontal line, and no combination will permit of but one solution. Since these are all the possible combinations and a solution is given for every one it follows that no other solutions are possible than those above given.

It is but just to say that the first demonstration of the possible solutions of the first method was printed by me in the *Bulletin* of Feb. 26; showing that in the 13, 15, 14 difficulty position, two solutions were possible, but that the box must be turned if the 1 was to occupy the left hand upper square. Afterwards a paraphrase of this was printed in the New York *Herald* of Feb. 28, without credit.

Erratum on page 258, 3d line from bottom. For 1000 meters read 1000 feet.

R. RATHNUN.